

AS Unit 1: Basic Biochemistry and Cell Organisation

Name:	Date:
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Topic 1.2 Cell Structure and Organisation – Page 4

I. Eukaryotic Cells part (ii)

i.) Further Practice

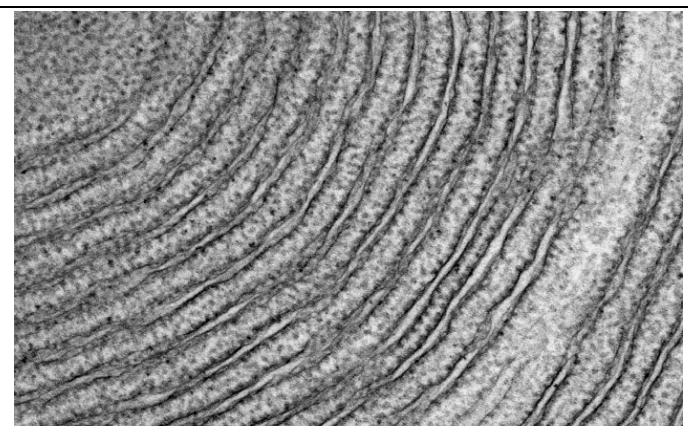
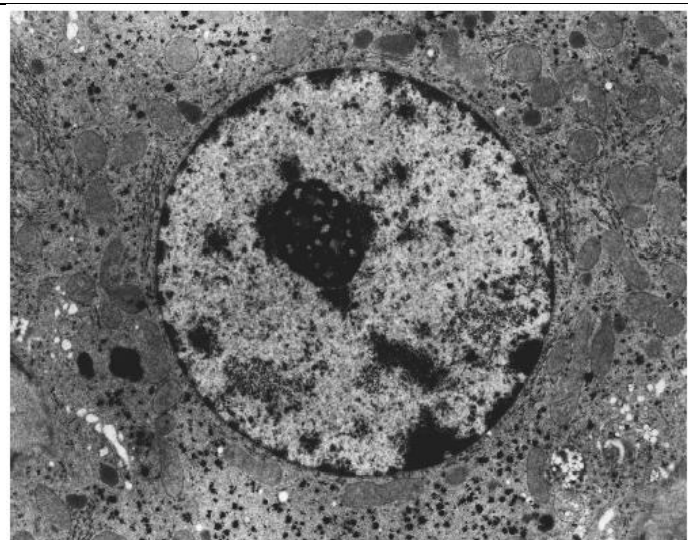
		Completed
1.	Read further about the ultrastructure of plant and animal cells. <ul style="list-style-type: none">• Look at the PowerPoint 'B Cells'	
2.	In groups complete the Quiz on Cell Structure	
3.	Complete the questions on 1.2h Ultrastructure of Cells – Further Practise	
4.	Revise for a mini test on everything covered so far.	

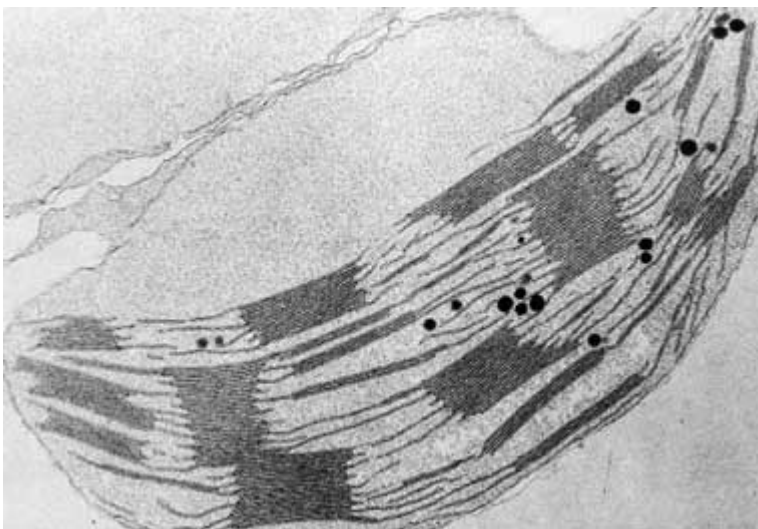
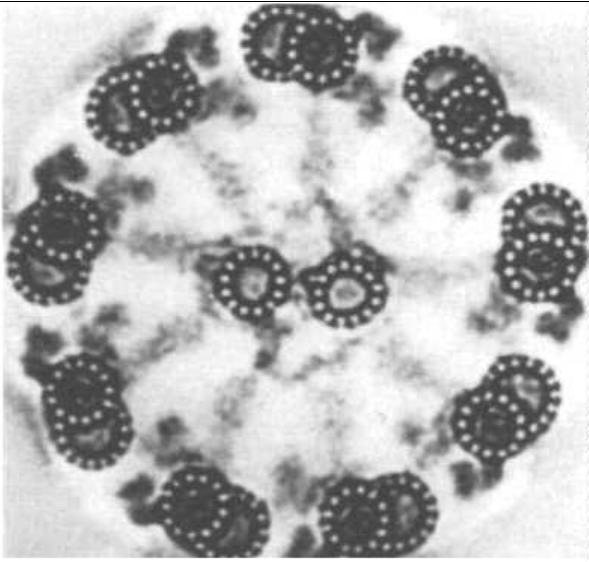


Skills

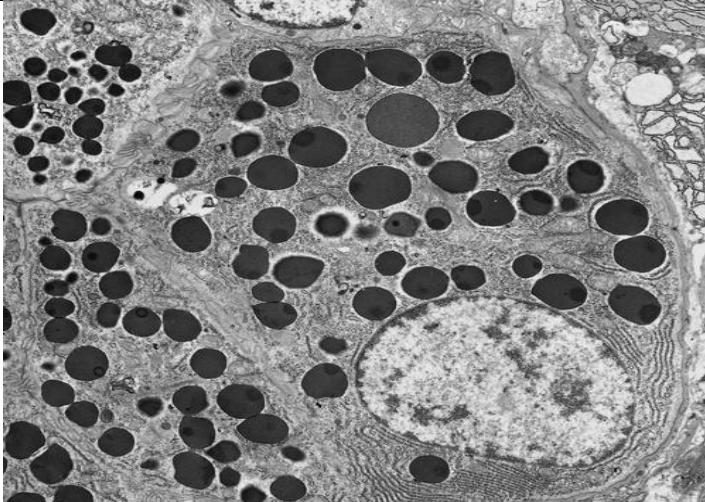
Interpretation of electron micrographs to identify organelles and deduce the function of specialised cells

Identify the organelles from the following electron micrographs.

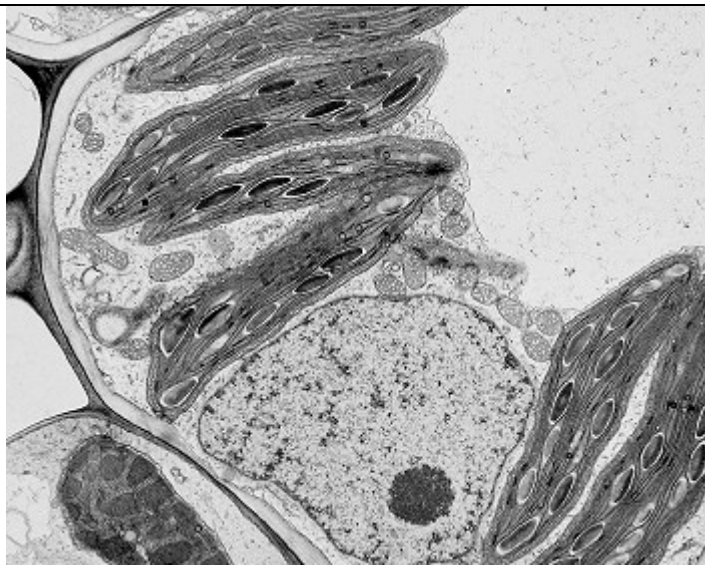




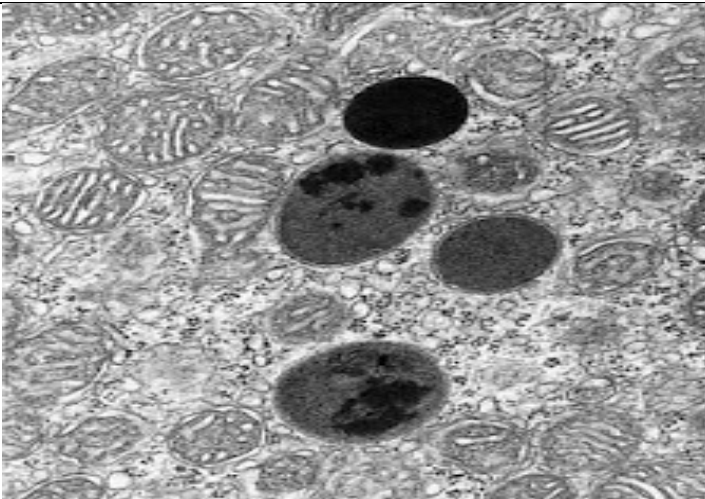
Have a guess at the function of these cells from the micrographs and descriptions.



These cells from the mouth are producing a lot of vesicles filled with a protein.



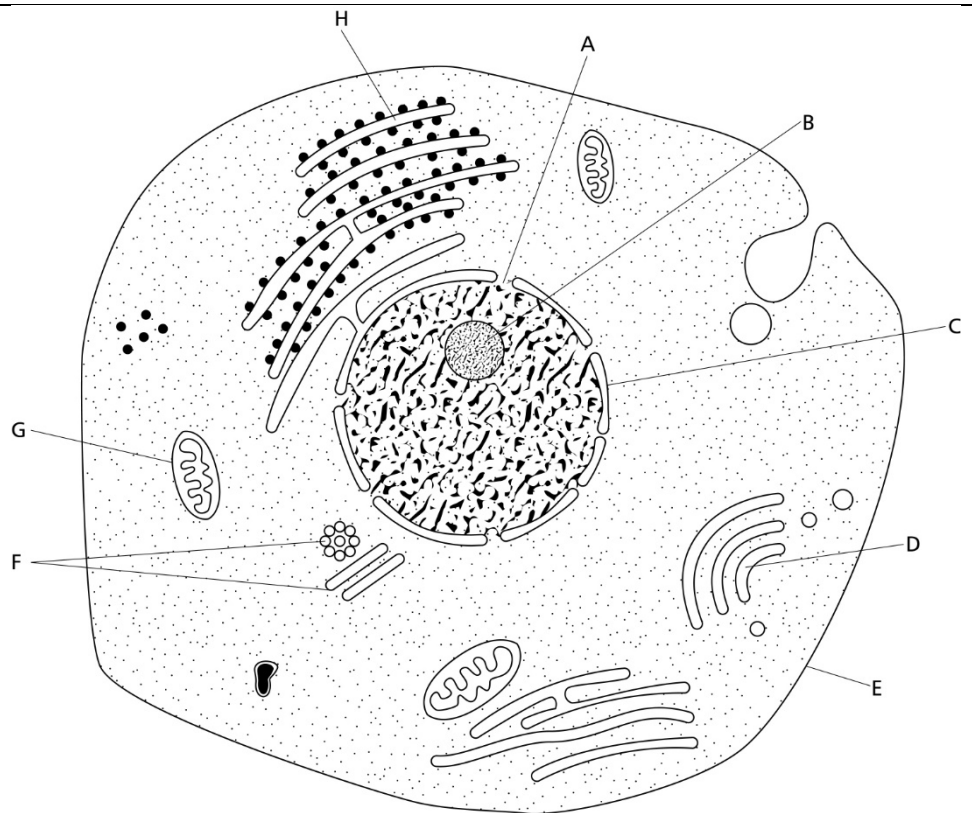
Plant cells with lots of chloroplasts



A cell with a lot of mitochondria and four lysosomes.



Practice

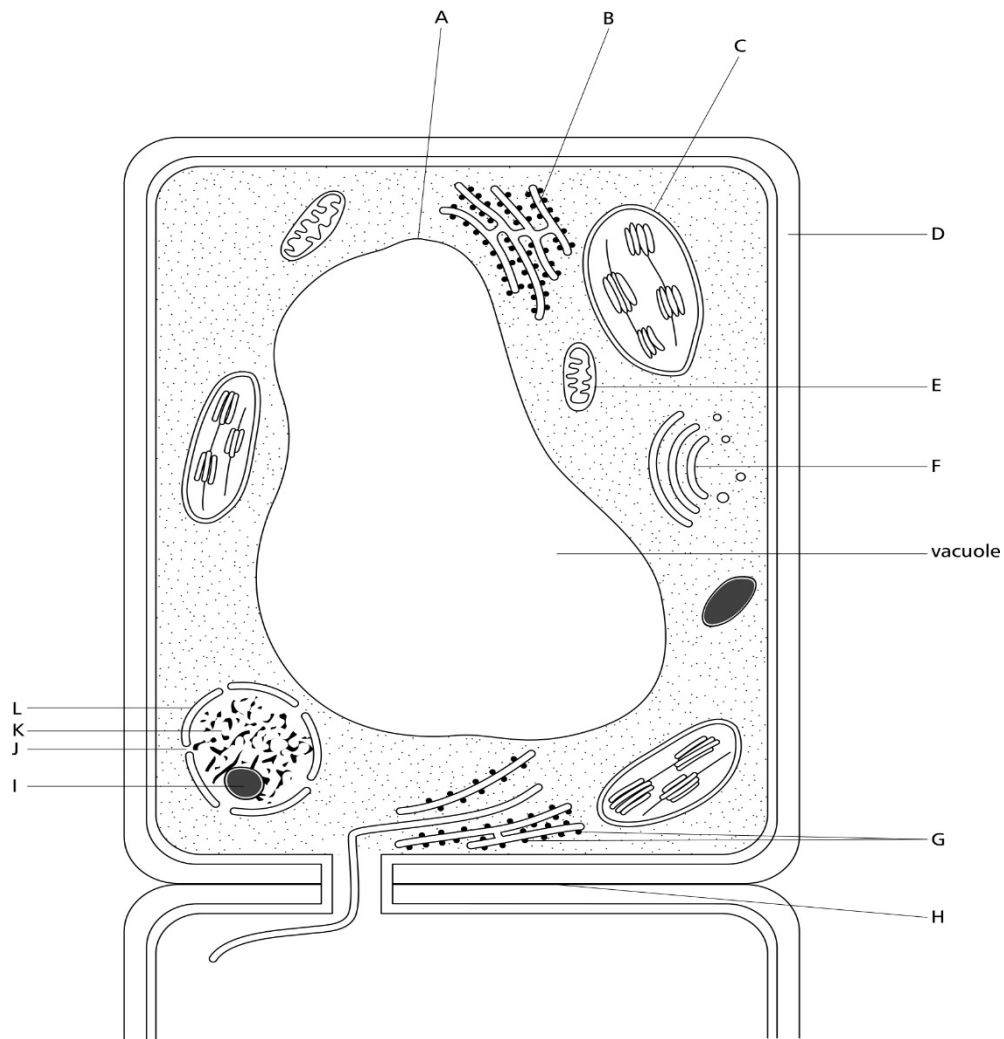


1) Label the structures A-H

A	B	C	D
E	F	G	H

2) Calculate the magnification of the diagram.

3) Label the plant cell.



40µm

4) List three feature seen in plant cells but not animal cells.

- i) _____
- ii) _____
- iii) _____

6) Calculate the magnification of the cell.

5) Which of the following structures are present in **both** plant and animal cells?

- I. Cell wall
 - II. Chloroplast
 - III. Mitochondrion
- A. I only
 - B. I and II only
 - C. I and III only
 - D. III only

6) If a *Sequoia sempervirens* tree is 100 m tall and a drawing of it is 100 mm tall, what is the magnification of the drawing?

- A. $\times 0.001$
- B. $\times 0.1$
- C. $\times 1.0$
- D. $\times 1000$

7) A red blood cell is 8 μm in diameter. If drawn 100 times larger than its actual size, what diameter will the drawing be in mm?

- A. 0.08 mm
- B. 0.8 mm
- C. 8 mm
- D. 80 mm

8) If a mitochondrion has a length of 5 μm and a student's drawing of the mitochondrion is 10 mm, what is the magnification of the drawing?

- A. $\times 0.0005$
- B. $\times 0.5$
- C. $\times 200$
- D. $\times 2000$